Sass/Compass



Or how it finally clicked and I learned to love preprocessors

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halofx.com hackmonkey.com



Why?



"Because CSS is Hard"

- Chris Eppstein





In the beginning...

CSS has allows been a bit of trouble.

1980's- SGML had stylesheets

1990- Stylesheets goal of HTML from beginning

1995- HTML 2.0, no stylesheets

1996- CSS1 spec

IE3 offers text support, no box support

1997- HTML 3.2 & HTML 4.0

NN4 offers limited CSS support, only because of IE





1998- HTML4.0 & CSS2 spec

Neither IE4 or NN4 support CCS1 well.

1999- CSS3 drafts start to show up.

- CSS3 broke into modules
- Browser prefix Hell
- IE5, Netscape fading fast

2013- CSS3 modules still evolving!

Firefox still requires -moz-box-sizing!





- Write in one syntax and output in a different syntax
- Extends CSS by writing a stylesheets in an extended meta-language format and compiling out to valid CSS.
- Emphasis on DRY (don't repeat yourself)
- No browser dependencies





- Variables
- Define & reuse common rules
- Automate common syntax
- Make minor changes to existing rules
- Better organization of rules
- Perform math calculations

Sass & LESS



Sass - sass-lang.com

- Syntactically Awesome Stylesheets
- 2 syntax, (Sass, SCSS)
 - Identical functionality
- Ruby based app
- Compass support

LESS - lesscss.org

- Paired down version of Sass
- Javascript based app
- Influenced Sass v2 syntax



Sass

Sass



Sass {style with attitude}

sass-lang.com



\$ gem install sass

\$ mv style.css style.scss

\$ sass --watch style.scss:style.css

Tutorial Documentation

Blog

Try Online

Latest Release: Media Mark (3.2.10)

What's New?

Sass makes CSS fun again. Sass is an extension of CSS3, adding <u>nested rules</u>, <u>variables</u>, <u>mixins</u>, <u>selector inheritance</u>, and <u>more</u>. It's translated to well-formatted, standard CSS using the command line tool or a web-framework plugin.

About

Sass has two syntaxes. The most commonly used syntax is known as "SCSS" (for "Sassy CSS"), and is a superset of CSS3's syntax. This means that every valid CSS3 stylesheet is valid SCSS as well. SCSS files use the extension .scss.

The second, older syntax is known as https://doi.or/10.25. Inspired by Haml's terseness, it's intended for people who prefer conciseness over similarity to CSS. Instead of brackets and semicolons, it uses the indentation of lines to specify blocks. Files in the indented syntax use the extension .sass.



- Editor Support
- Development



Sass



Sass – Original syntax

- Syntactically Awesome Stylesheets
- Indented format
 - White space matters
 - No curly brackets or ;
- .sass extension

SCSS – Newer syntax

- Sassy CSS
 - White space doesn't matter
 - Uses curly brackets and;
- scss extension
- Any valid CSS is valid SCSS

Functionally identical, SCSS most commonly used



Sass Code Examples





sass-lang.com/docs/yardoc/file.SASS_REFERENCE.html#nested_rules

```
nesting.scss
                                             nesting.css
  article {
                                               article {
  margin: 2em 0;
                                               margin: 2em 0;
  h1 {
  color: #005bcc;
                                               article h1 {
                                               color: #005bcc;
6 ..ul.{
  list-style: none;
                                               article ul {
  padding: 10px 0;
                                              list-style: none;
  li {
                                              padding: 10px 0;
  display: inline;
                                               article ul li {
   text-decoration: none;
                                               display: inline;
                                           12
   13
                                               article ul li a {
  }
                                           15
                                               text-decoration: none;
```





sass-lang.com/docs/yardoc/file.SASS_REFERENCE.html#variables

```
variables.scss
                                                    variables.css
                                                       body {
                                                       background: url(/images//texture.jpg
    $path: "/images/";
    $blue: #1ea8ff;
    $serif: georgia, times, serif;
    $sans: arial, trebuchet, sans;
                                                       h1 {
                                                       font-face: arial, trebuchet, sans;
                                                       color: #1ea8ff;
    body {
    background: url(#{$path}/texture.jpg
11
    h1 {
                                                   11
                                                       font-face: georgia, times, serif;
    · font-face: $sans;
                                                   12
                                                       color: #0090ea;
    color: $blue;
    font-face: $serif;
    ··color: darken($blue, 10%);
```





sass-

lang.com/docs/yardoc/file.SASS_REFERENCE.html#referencing_parent_selectors

```
parent.scss
                                                      parent.css
                                                         div a {
 div a {
 color: #ce4dd6;
                                                         color: #ce4dd6;
 **. &:hover \{ \color: \#ffb3ff; \cdot\}
                                                         div a:hover {
  ··&:visited·{·color:·#c458cb;·}
                                                         color: #ffb3ff;
                                                         div a:visited {
                                                         color: #c458cb;
```





sass-lang.com/docs/yardoc/file.SASS_REFERENCE.html#mixins

```
mixin.scss
                                              mixin.css
  @mixin nav-list {
                                                 ul·{
  list-style-type:none;
                                                 list-style-type: none;
  padding:0;
                                                 padding: 0;
  margin:0;
                                                 margin: 0;
  > li{
  display:block;
                                                 ul > li {
  float:left;
                                                 display: block;
  &:last-child{
                                                 float: left;
  margin-right:0px;
                                                 ul > li:last-child {
                                                 · margin-right: 0px;
  }
                                             12
  ul {
  @include nav-list;
```





sass-lang.com/docs/yardoc/file.SASS_REFERENCE.html#mixin-arguments

```
arguments.scss
                                                          arguments.css
                                                             html {
                                                            font-size: 62.5%;
    html { font-size: 62.5%; }
    $base-font-size: 10px;
    $rem-ratio: $base-font-size / 1rem;
                                                             p · {
                                                           ·· font-size: 16px;
    @mixin rem($key,$px) {
                                                             font-size: 1.6rem;
    #{$key}: $px;
    #{$key}: $px/$rem-ratio;
                                                             .box {
11
                                                             padding: 10px;
                                                             · · padding: · 1rem;
12
13
    • @include rem(font-size,16px);
                                                        13
    .box {
    · · @include · rem(padding, · 10px);
```





sass-lang.com/docs/yardoc/file.SASS_REFERENCE.html#extend

```
extend.scss
                                                extend.css
                                                   .box, .big-box, .little-box {
    .box {
    border: 2px solid black;
                                                   border: 2px solid black;
    margin: 1em;
                                                   margin: 1em;
    width: 200px;
                                                   width: 200px;
    .big-box {
                                                   .big-box {
    @extend .box;
                                                   width: 300px;
    width: 300px;
                                                   .little-box {
11
                                              11
12
                                              12
    .little-box {
                                                   width: 100px;
    @extend .box;
                                              13
    width: 100px;
15
```





sass-lang.com/docs/yardoc/file.SASS_REFERENCE.html#comments

```
comments.scss
                                                         comments.css
    h1 {
                                                            h1 {
     font-size: 2em;
                                                            · · font-size: · 2em;
                                                            h2 {
    h2 {
                                                            · · font-size: ·1.75em;
    font-size: 1.75em;
                                                            · are not thrown out
     are not thrown out
                                                            h3 {
    h3 {
                                                       14
                                                            · · font-size: · 1.5em;
                                                       15
    font-size: 1.5em;
17
                                                       17
```



Partials



sass-lang.com/docs/yardoc/file.SASS_REFERENCE.html#partials

```
colors.scss
                                                  text.scss
                                                   //·Font·Variables
  $blue: \#0000ee;
                                                   $sans: arial, helvetica;
  $red: +#ee0000;
                                                   $serif: georgia, times;
                                                   font-family: $sans;
partial.scss
                                                 partial.css
                                                    div {
  @import "colors.scss";
                                                     ··border: ·1px · solid · #ee0000;
 div {
  border: 1px solid $red;
 @import "sub/text";
                                                    font-family: arial, helvetica;
```

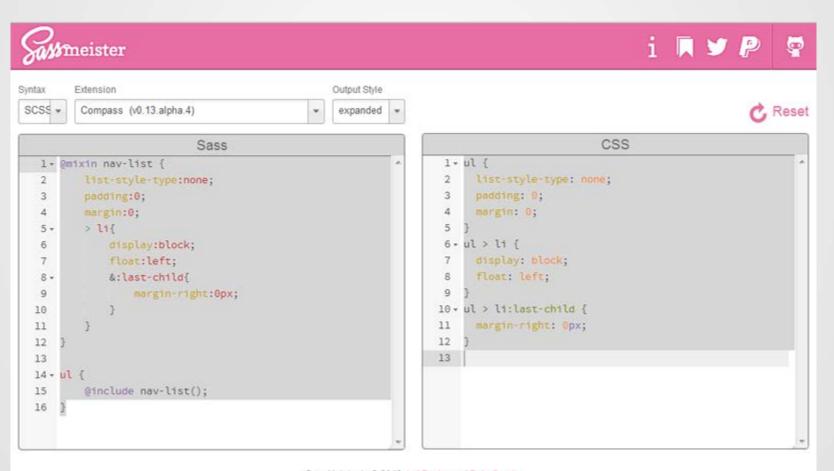


Tools





sassmeister.com



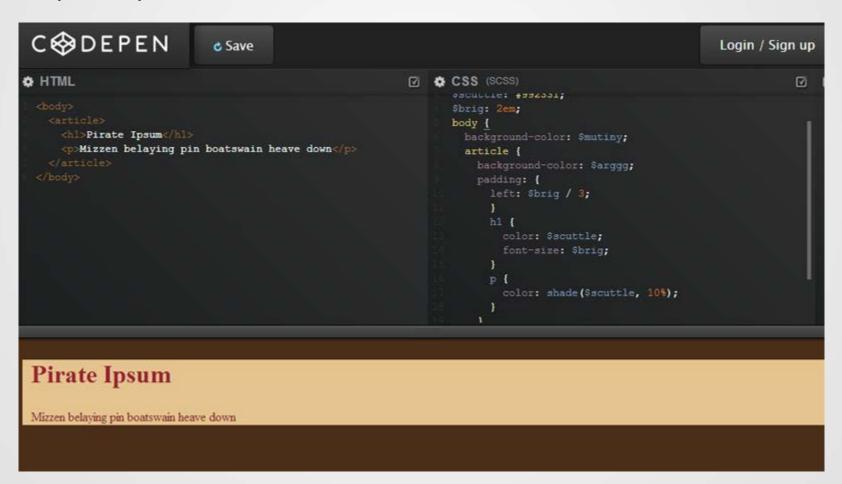
SassMeister is @ 2013 Jed Foster and Dale Sande.



Codepen



codepen.io/pen/

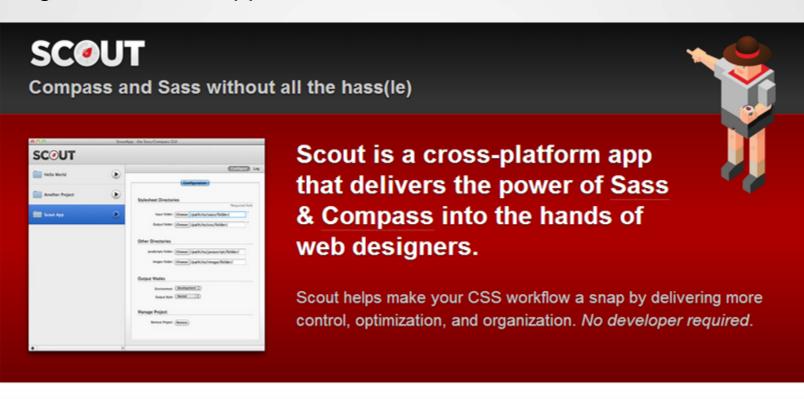






mhs.github.io/scout-app

Download Scout



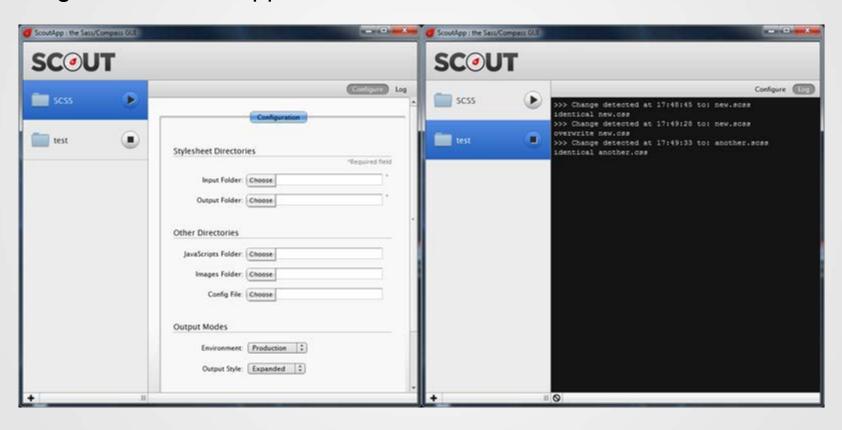
Since Sass and Compass are Ruby gems, they require that you have a working

TELL ME MORE!





mhs.github.io/scout-app







Fire.app - The fast prototyping tool

compass.handlino.com

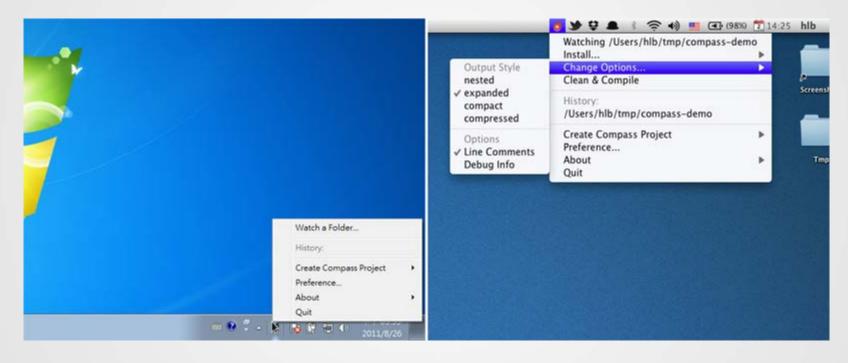
stylesheets easily without resorting to command line interface.







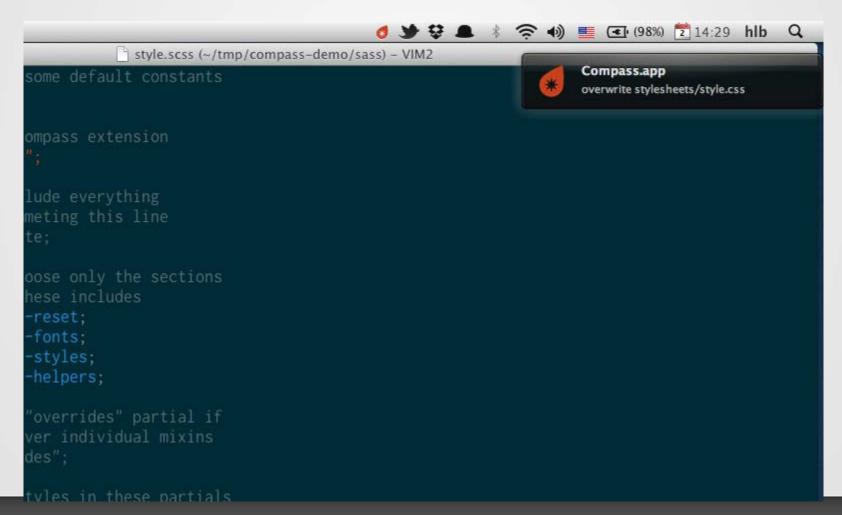
compass.handlino.com







compass.handlino.com







compass.handlino.com



Compass Report



Compass Report:

directory compass-demo/ directory javascripts/ directory sass/ directory partials/ directory stylesheets/ create config.rb create style.scss create _base.scss create _overrides.scss create _fonts.scss create _media.scss create _page.scss create index.html create index.html.haml create jquery.min.js create modernizr.min.js create respond.min.js create plugins.js create script.js create 404.html create .htaccess create crossdomain.xml create robots.txt ----------------



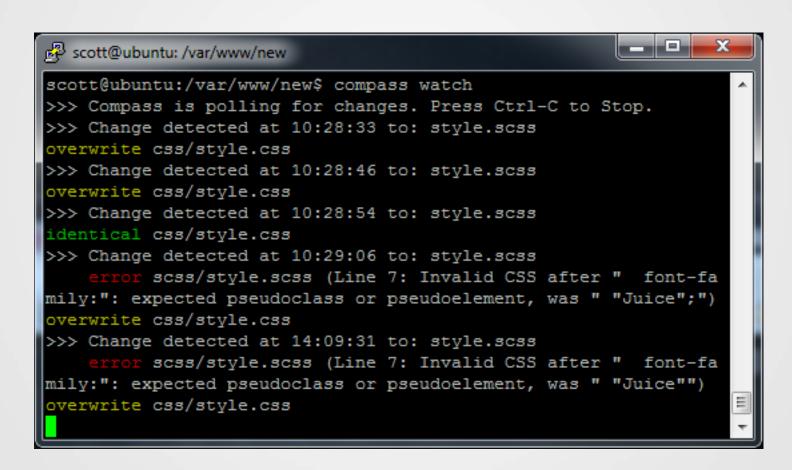


compass-style.org



Compass

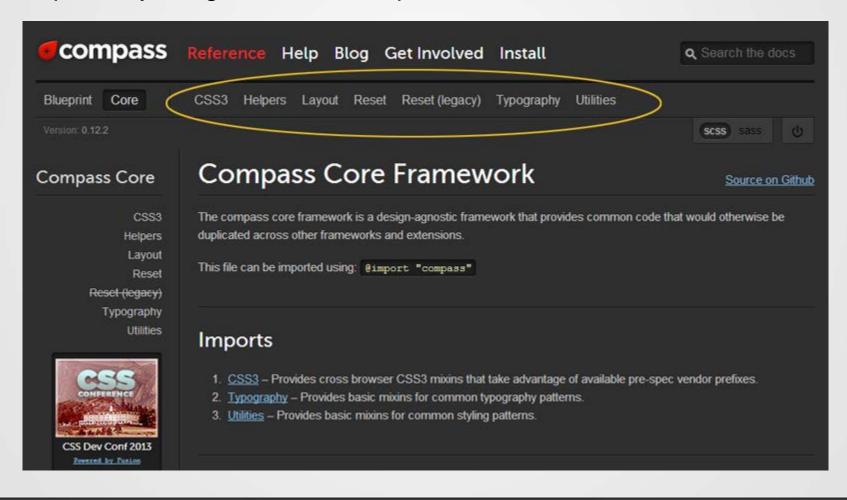








compass-style.org/reference/compass







Source on Github

compass-style.org/reference/compass

CSS3

Appearance Background Clip Background Origin Background Size Border Radius Box

> Box Shadow Box Sizing

CSS Regions CSS3 Pie

Columns

Filter Font Face

Hyphenation

Images

Inline Block

Opacity

Shared Utilities

Text Shadow

Transform

Transform (legacy)

Compass CSS3

The CSS3 module provides cross-browser mixins for CSS properties introduced in CSS3, for example border-radius and text-shadow.

What rendering engines you support for the experimental css properties is governed by the configurable variables defined in the browser support module.

This file can be imported using: @import "compass/css3"

Imports

- Appearance Specify the CSS3 appearance property.
- 2. Background Clip Specify the background clip for all browsers.
- 3. Background Origin Specify the background origin for all browsers.
- Background Size Specify the background size for all browsers.
- 5. Border Radius Specify the border radius for all browsers.
- Box This module provides mixins that pertain to the CSS3 Flexible Box.
- Box Shadow Specify the box shadow for all browsers.
- Box Sizing Specify the box sizing for all browsers.
- Columns Specify a columnar layout for all browsers.
- Filter Specify the (image) filter for all browsers.





```
mixin.scss
                                                mixin.css
                                                  ul·{
    @mixin nav-list {
    list-style-type:none;
                                                   list-style-type: none;
    padding:0;
                                                  padding: 0;
    margin:0;
                                                   margin: 0;
    > li{
                                                  ul > li {
    display:block;
    float:left;
                                                   display: block;
    %:last-child{
                                                   float: left;
    margin-right:0px;
                                                   ul > li:last-child {
11
    }
                                              11
                                                   · margin-right: 0px;
12
                                              12
    ul·{
    @include nav-list();
15
```



Horizontal List



compass-style.org/reference/compass/typography/lists/horizontal_list

```
horiz_list.scss
                                            horiz_list.css
  @import "compass";
                                               ul {
                                               margin: 0; padding: 0; border: 0;
 ul {
                                               overflow: hidden; *zoom: 1;
  · @include horizontal-list();
                                               ul li {
                                               list-style-image: none;
                                               list-style-type: none;
                                               margin-left: 0;
                                               white-space: nowrap;
                                              display: inline;
                                               float: left;
                                          11
                                               · · padding-left: · 4px;
                                          13
                                               padding-right: 4px;
                                               ul li:first-child, ul li.first {
                                          15
                                               padding-left: 0;
                                          17
                                               ul li:last-child { padding-right: 0; }
                                               ul·li.last { · padding-right: ·0; · }
                                          19
```



Border Radius



compass-style.org/reference/compass/css3/border_radius

```
border_radius.scss
                                                      border radius.css
                                                         div.default {
    @import "compass";
                                                        -webkit-border-radius: 12px;
    $default-border-radius: 12px;
                                                        -moz-border-radius: 12px;
    $rad: $default-border-radius / 2;
                                                         -ms-border-radius: 12px;
                                                        ···-o-border-radius: 12px;
    $ius: 2px;
                                                        border-radius: 12px;
    div.default {
    @include border-radius();
                                                        div.multiple {
                                                         ··-webkit-border-radius: 10px 6px;
11
    div.multiple {
                                                    11
                                                         -moz-border-radius: 10px / 6px;
    @include border-radius(10px, $rad);
12
                                                    12
                                                         ··border-radius: 10px · / ·6px;
    div.math {
                                                    15
                                                         div.math {
    @include border-radius($rad + $ius);
                                                        --webkit-border-radius: 8px;
17
                                                    17
                                                         -moz-border-radius: 8px;
                                                        -ms-border-radius: 8px;
                                                         -o-border-radius: 8px;
                                                         border-radius: 8px;
```





compass-style.org/reference/compass/css3/font_face

```
text.scss
font.scss
                                                   font.css
 @import "compass";
  @import "sub/text";
                                                      font-family: arial, helvetica;
 @include font-face("Juice", font-files("
    juice.woff", "juice.eot", "juice.svg"));
                                                  6 @font-face {
 h1 {
                                                     font-family: "Juice";
  font-family: "Juice", $sans;
                                                    --src: url('//fonts/juice.woff') format('
                                                         woff'), url('//fonts/juice.eot')
                                                          format('embedded-opentype'), url('
                                                          //fonts/juice.svg') format('svg');
                                                 11
                                                     h1 - {
                                                      font-family: "Juice", arial, helvetica;
                                                 13
```





compass-style.org/reference/compass/css3/images

```
grad.css
 grad.scss
    @import "compass";
    @import "colors";
    .grad {
    height: 50%;
    width: 50%;
    border: 1px solid black;
    @include background-image (linear-gradient($red, $blue));
    @include filter-gradient($red, $blue);
11
```





compass-style.org/reference/compass/css3/images

```
grad.scss
                      grad.css
    /*·Color·Variables·*/
    .grad {
    height: 50%;
    width: 50%;
    border: 1px solid black;
    background-image: -webkit-gradient(linear, 50% 0%, 50% 100%, color-stop(0%, #ee0000),
        color-stop(100%, #0000ee));
    background-image: -webkit-linear-gradient(#ee0000, #0000ee);
    background-image: -moz-linear-gradient(#ee0000, #0000ee);
    background-image: -o-linear-gradient(#ee0000, #0000ee);
    background-image: linear-gradient(#ee0000, #0000ee);
10
11
    *zoom: 1;
    filter: progid:DXImageTransform.Microsoft.gradient(gradientType=0, startColorstr='
        #FFEE0000', endColorstr='#FF0000EE');
13
```





compass-style.org/reference/compass/css3/box_shadow

```
shadow.css
 shadow.scss
    @import "compass";
    @import "colors";
    .shadow {
    @include box-shadow;
     .offset {
    • @include box-shadow(rgba($blue, 0.4) 4px 4px 10px);
11
12
    $experimental-support-for-webkit: false;
    $experimental-support-for-mozilla : false;
    .multi {
    ··@include·box-shadow($blue·0·5px·15px, * $red·0·0·5px·2px·inset);
```





compass-style.org/reference/compass/css3/box_shadow

```
shadow.scss
                        shadow.css
     .shadow {
    ···-webkit-box-shadow: ·0px·0px·5px·#333333;
    ··-moz-box-shadow: ·0px ·0px ·5px ·#333333;
     · · box-shadow: · 0px · 0px · 5px · #333333;
     .offset {
     ··-webkit-box-shadow: rgba(0, 0, 238, 0.4) 4px 4px 10px;
     ··-moz-box-shadow: rgba(0, 0, 238, 0.4) 4px 4px 10px;
     box-shadow: rgba(0, 0, 238, 0.4) 4px 4px 10px;
11
12
     .multi {
     ··box-shadow: #0000ee ·0 ·5px ·15px, ·#ee0000 ·0 ·0 ·5px ·2px ·inset;
15
```





compass-style.org/reference/compass/utilities/sprites

```
index.html
  <link href="css/sprites.css" rel="stylesheet" type="text/css" />
  <a href="/" class="icons-drupal">Drupal</a>
  <a href="/" class="icons-rss">Drupal</a>
  <a href="/" class="icons-share">Drupal</a>
                                                                               drupal.png
                                                                                            drupal_hover.png
                                                                                              rss_hover.png
                                                                                 rss.png
                                                                                share.png
                                                                                             share_hover.png
```





compass-style.org/reference/compass/typography/text/replacement

```
index.html
 sprites.scss
    @import "compass";
    @import "icons/*.png";
    @include all-icons-sprites;
    @include hide-text;
     display: inline-block;
    width: 64px;
    height: 64px;
11
```



Sprites



compass-style.org/help/tutorials/spriting/magic-selectors

```
index.html
 sprites.css
                      sprites.scss
     .icons-sprite, .icons-drupal, .icons-rss, .icons-share {
    background: url('/images/icons-sa26b5585ba.png') no-repeat;}
    .icons-drupal{ background-position: 0 -64px;}
    .icons-drupal:hover, .icons-drupal.drupal hover, .icons-drupal.drupal-hover {
    background-position: 0 -320px;}
    .icons-rss {background-position: 0 0;}
     .icons-rss:hover, .icons-rss.rss hover, .icons-rss.rss-hover {background-position: 0 · -192px;
11
     .icons-share {background-position: 0 -128px;}
     .icons-share:hover, .icons-share.share hover, .icons-share.share-hover {
12
     background-position: 0 -256px;}
    text-indent: -119988px;
17
    overflow: hidden:
    text-align: left;
    display: inline-block;
    width: 64px;
    height: 64px;}
```

Errors



Syntax error: Invalid CSS after " font-family:": expected pseudoclass or pseudoelement, was " "Juice";" on line 6 of /var/www/new/scss/style.scss

1: /var/www/new/scss/style.scss

Hello

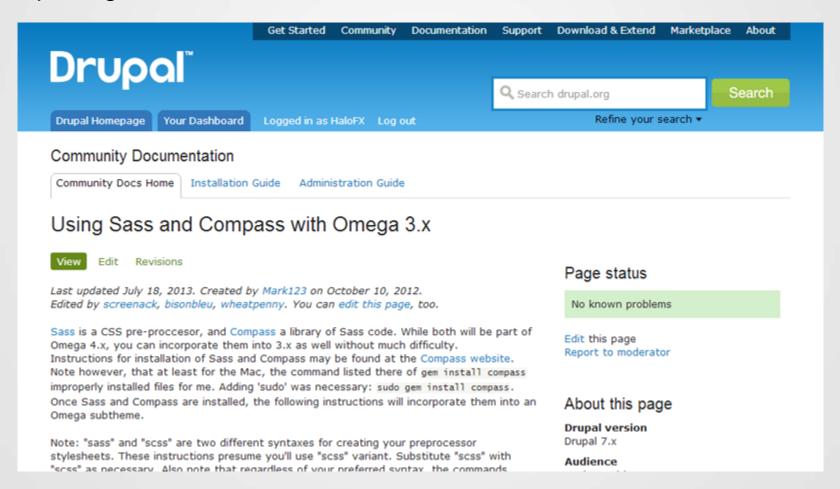


Drupal





drupal.org/node/1808252







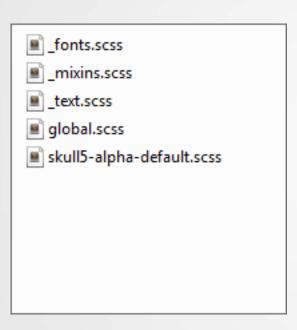
compass create . --sass-dir=scss --css-dir=css --bare

- Copy all files from css folder to scss folder
- Rename all .css files to .scss





<theme>/scss



<theme>/css

global.css skull5-alpha-default.css





Or how it finally clicked and I learned to love preprocessors

Scott Wilkinson HaloFX Media

#HaloFX @hackmonk3y

halofx.com hackmonkey.com